and to assist in the management of the case. He "screened" the patient after a bismuth meal and secured a picture of the conditions immediately following. It very prettily showed the gourd-shaped oesophagus, with the constriction of the cardiac ring holding back the bismuth meal. Nothing else that was pathological was observed, except that there seemed to be a bulging or dilatation of the aorta just distal to the heart.

Six days later, we effected the first dilatation, following out the method outlined above in its various steps. Fifteen minutes after the dilatation, the patient swallowed a glassful of water without any symptom of spasm or distress. It was the first comfortable experience of the kind he had had in months. His next meal was enjoyed, as well as subsequent meals.

It was deemed best to do nothing else of a radical nature and for the next two weeks he was given suitable nourishment, with rest and massage. Under this regime, he improved markedly in strength and general mental and nervous tone.

The condition of the kidneys was not grave and the relief from the strain of the daily vomiting upon his arterial system made the situation much safer for the patient.

Dr. E. Avery Newton was called in consultation for the purpose of taking an electro-cardiographic picture, as we desired to obtain more data relating to the circulation, with the idea of applying a series of Nauheim baths. A second dilatation was made and the patient was put upon a suitable diet and the baths begun. A third dilatation was tried, but failed. He continued to maintain his improved condition as to the spasm, but soon passed out of my care into other hands. Since then, after some indiscretion, I was told, he sustained another cerebral hemorrhage.

Following the relief of the cardiospasm the improvement of the general tone and physical strength was immediate and quite remarkable. With this, there was less mental depression and a very much more livable existence for the patient —for he was indeed in a very precarious condition before the cardiospasm was corrected. The correction paved the way for his future betterment and made it possible.

SELECTED APHORISMS FROM ISAAC JUDAEUS, 830-932 A. D.

The physician who promises to cure disease with certainty takes a serious responsibility upon himself.

Never rely in treatment upon wonderworking cures, for these depend upon ignorance and superstition.

Seal thy mouth to prophetic and self-evident expressions. What thou sayest should generally be stated as conditional.

Suffer not thy mouth to condemn when something happens to a physician, for everyone has his evil day. Let thy deeds praise thee, and seek not thine honor in another's shame.

Make it thy special concern to visit and treat poor and needy patients, for in no way can thou find more meritorious service.

A NEW DEVICE FOR HOLDING FRACTURES OF THE LONG BONES.

J. A. SIMPSON, M. D., San Francisco.

The present treatment of fractures of the long bones has not given uniformly good results. While the introduction of the Lane plate has marked a distinct advance in the treatment of these cases, the results have often been disappointing.

The reason for this is not difficult to see; the screws used taper from head to point and cut their own thread in the bone. Living bone, under pressure, may absorb, leaving the screw loose. The plate separates from the bone and muscle pull brings about shortening and deformity. The loose plate and screws become irritating foreign bodies and have to be removed. The last end of that patient is worse than the first.

Believing that the principle of the internal splint is sound, but that its application has been faulty, I have constructed a device free from the objections above mentioned. It consists of two parts,—a screw and a cannula, and is called a bushing-screw, as the device is both a screw and a bushing. The length of the screw corresponds accurately with the depth of the bore in the bone (the diameter of the bone) and is threaded only for a short distance at the head end, as shown in the plate (Fig. 7).

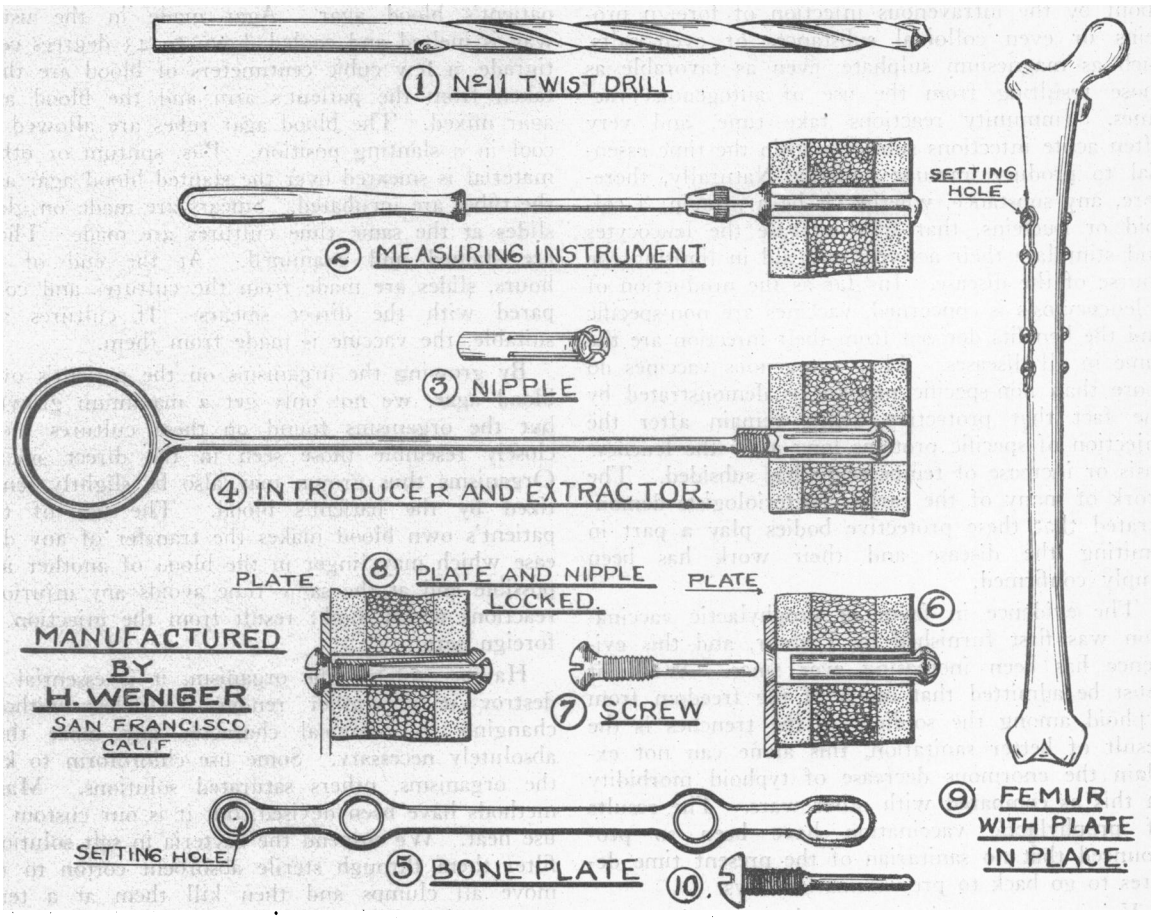
The cannula, marked nipple (Fig. 3), has a double taper head on the distal end, to facilitate introduction and extraction. Four longitudinal, parallel sections are cut out for two-thirds of its length, beginning at the distal end, which enables it to pass through the drill hole prepared for it. At its proximal end it is threaded on the inner surface for about one-third of its length to correspond with the threads on the screw. The cannula is made the exact size of a standard drill, for the femur, No. 11 twisted drill (Fig. 1). The portion of the cannula from which the sections have been removed is tempered and slightly spread, in order, by friction, to facilitate the insertion of the screw.

An inserter and extractor (Fig. 4) is used as its name suggests.

A caliper (Fig. 2) is used for measuring the length of the drill hole.

In oblique fractures no plate is needed; all that is necessary is to expose the fracture by incision, reduce it and with the bone held firmly drill two holes, properly located, pass the screws through and tighten them.

In transverse fractures a plate is needed and one that differs somewhat from those in general use, in that fewer holes are needed, but of somewhat larger size (Fig. 5). The first screw is inserted at point marked setting hole. In the other end is a slot instead of a hole; here the second screw is inserted by making the bore at the center of the slot. This arrangement enables the operator to readjust the fragments, if necessary, without removing the plate; a flat head screw



(Fig. 10) is used here. With the end screws tightened the other holes are drilled and screws inserted and tightened. Fig. 9 shows bone plated.

The advantages of this device are that when applied, it has the effect of a screw with a head on both ends. It gives a firm grip on the plate, if one is used, and on the compact tissue on the opposite side of the bone.

Furthermore, nothing is left to chance or guesswork and the operator works with all the precision of a machinist. The standardization of tools alone is of no small advantage.

The parts of the bushing-screw can be made to correspond in size with that of any of the long bones; so far we have confined our work to the femur alone.

The message of the European war and the suffering of our countrymen have taught us this, and it is a lesson which I believe we shall all incorporate in our school tradition: that by the small incident and by attention to small details, by accurate work, by the passion and love for minutiae, we shall enlarge the horizon of those we have to teach, so that old quarrels between nations that should be friendly vanish as they are seen in their true proportion, and a new people will be built up that will lay a firm hold upon true principles of government and thereby secure the healthy progress of mankind.—From the address of Prof. Geoffrey Butler, Dean of Corpus Christi College, Cambridge University, at the 53d University Convocation.—"Volta Review."

VACCINE THERAPY.

By T. H. GLENN, M. D., Los Angeles.

The use of vaccines as a prophylactic, as well as a curative measure, has undoubtedly been overrated by some workers, and under-valued by others. Frankel, Miller and others have shown that many of the reactions, which were earlier thought to be produced by autogenous vaccines only, can be produced by non-specific proteins. Others have shown that good results, especially in arthritic cases, may be brought about by the intravenous injection of colloidal preparations, of which colloidal sulphur, produced by the French, is a good example. Even as early as 1893, DeBacher of Paris recommended the use of the yeast ferment in the treatment of microbic diseases. Victor Vaughn, in 1894, advocated the use of nuclein and nucleinic acid in the treatment of disease, claiming that the natural resistance to disease is strengthened by a physiological increase of the white corpuscles which is induced by the introduction of nucleins and similar substances. Hawk and his co-workers have recently revived yeast therapy and report some interesting results.

Most of the workers, such as Miller and Frankel, have limited their investigations to typhoid fever or acute arthritis, usually self-limited diseases. In many of their cases, they were able to limit the course of the disease by the injection of foreign proteins. It should excite no surprise that good results in acute infections may be brought